

**Summary of Responses to Comment  
on the Adequacy of the Transportation Conformity Budgets  
Contained in Georgia's Phase 2 Ozone Attainment Demonstration**

*U.S. EPA Region 4 received comments from several environmental groups. This document contains a summary of comments and our responses.*

**I. SIP Does Not Demonstration Attainment by 1999 - Use of the Attainment Date Extension Policy.**

**Comment:** The objection is that a plan which purports to demonstrate attainment of the National Ambient Air Quality Standards (NAAQS) no earlier than 2003 does not satisfy the requirement of section 182(c)(2) of the Clean Air Act (CAA) and any motor vehicle emissions budget (MVEB) derived from an unapprovable plan may not be found to be "adequate" for conformity purposes.

**Response:** Several commentors objected to EPA basing its determination of adequacy on a 2003 attainment date, and raised issues concerning the validity of EPA's ozone transport policy for extending attainment dates for downwind areas, and the application of that policy to the Atlanta region. In the December 16, 1999, proposal regarding Atlanta's attainment demonstration, EPA proposed that if it finds that Atlanta is eligible for an attainment date extension under this policy, then its attainment date would be extended from 1999 to 2003.

EPA finds it unnecessary here to address the substance of commentors' objections to the attainment date extension policy, since whether or not the policy is applied to Atlanta, it is reasonable to expect that the area will be subject to the later attainment date of 2003. This is because even if the attainment date extension policy is not applied to Atlanta, and even assuming that EPA takes final action to determine that Atlanta did not attain by its original attainment date of 1999, the area would then be reclassified as a severe area with an attainment date later than 1999 – as expeditiously as practicable, but no later than 2005. The State has determined that attainment as expeditiously as practicable would be no sooner than 2003.

Thus, it is reasonable to forecast an attainment date for the area of 2003, regardless of whether the area is determined to be entitled to an extension under EPA's transport policy. Since the attainment date for purposes of an adequacy determination would be the same – 2003 – whether or not the area is given an attainment date extension or is reclassified, issues regarding the validity of the attainment date extension policy are irrelevant to the adequacy determination, and need not be resolved in this rulemaking.

The March 2, 1995, policy established a phased schedule for submission of attainment demonstrations for these serious and severe ozone nonattainment areas. EPA has entered into a consent decree (still subject to the section 113(g) notice and comment process) that would allow states to continue to follow the submission dates outlined in the 1995 policy. Consistent with the consent decree, the EPA *Guidance on Motor Vehicle Emissions Budgets in One-Hour Ozone Attainment Demonstrations*, issued on November 3, 1999, indicates that states with serious and

severe ozone nonattainment areas should submit MVEB no later than December 31, 1999. In order to establish MVEB in those states that had not been able to model attainment, states were to identify a set of additional control measures and commit to adopting measures sufficient to bring the area into attainment with the standard. The State of Georgia submitted a State Implementation Plan (SIP) on October 28, 1999, that established an MVEB for transportation conformity purposes. EPA's regulations identify the criteria to judge the adequacy of the submitted MVEB (40 CFR 93.118(e)(4)). EPA interprets the general adequacy criteria with respect to the Phase II attainment demonstration submissions as follows:

- The SIP must explicitly identify and quantify MVEB for oxides of nitrogen (NO<sub>x</sub>) and volatile organic compounds (VOC). The Georgia ozone attainment SIP provides an explicit MVEB for VOC and NO<sub>x</sub>.
- The MVEB, when considered together with all other emission sources, must be consistent with attainment. For the reasons described above, the Agency believes it is appropriate to evaluate attainment for Atlanta as of 2003. EPA has preliminarily concluded that the submitted SIP demonstrates attainment by 2003, and the MVEB is consistent with that demonstration.
- The budgets must be consistent with and clearly relate to the emissions inventory and the control measures in the submitted SIP. EPA interprets this to mean that the budgets must come from the local nonattainment area motor vehicle emissions inventory for the year that the SIP is demonstrating attainment, and that the MVEB must reflect appropriate and up-to-date projections of motor vehicle emissions for the attainment year. The local motor vehicle emissions inventory that establishes the budgets must include the effects of all motor vehicle controls that will be in place by the attainment year, including the federal measures and the mobile source control measures assumed in the NO<sub>x</sub> SIP Call. Also, the control measures assumed in the modeled attainment demonstration must be specifically identified and their emission reductions must be quantified. If the control measures are not already adopted, the SIP must include commitments to adopt these measures and schedules for adoption and implementation. Motor vehicle emissions budgets can be established based on a commitment to adopt the measures needed for attainment and identification of measures that can be used to achieve these emission reductions. Our preliminary conclusion is that the Georgia SIP satisfies these requirements.

The Georgia MVEB meets these requirements and therefore, is adequate for conformity purposes.

## **II. Reliance on Commitment to Adopt Additional Measures to Meet Shortfall**

**Comment:** Committal SIP cannot substitute for submitted control measures to meet the estimated shortfall as a basis for determining the adequacy of the MVEB.

**Response:** In order for EPA to find the MVEB adequate for conformity purposes, the budget must reflect all the motor vehicle control measures contained in the attainment demonstration, both those adopted and those yet to be adopted. Agency policy for areas needing additional emission reductions requires states to submit a list of potential measures that would achieve the additional emission reductions necessary for attainment and a commitment to adopt and implement by date certain, measures from this list needed to attain the standard. The November 3, 1999, *Guidance on Motor Vehicle Emissions Budgets in One-Hour Ozone Attainment Demonstrations* allows states to establish MVEB based on the measures identified in the SIP, providing there is a commitment that the additional emission reduction measures will not limit highway construction beyond the restrictions already in the submitted conformity budget. The State of Georgia has made such a commitment, therefore, the need for additional emission reductions to achieve attainment does not preclude the Agency from finding the submitted MVEB adequate. The December 16, 1999, proposed action to approve the Atlanta attainment demonstration, providing the State fulfills its commitments, also proposes in the alternative to disapprove the SIP, if the commitment by the Georgia Environmental Protection Division (EPD) to adopt and implement additional control measures by specific dates is not met. Should such action take place, the MVEB would no longer be adequate and the area would be under a conformity freeze unless EPA makes a protective finding of the submitted MVEB.

### III. Use of NO<sub>x</sub> SIP Call Reductions

**Comment:** Impermissible reliance upon NO<sub>x</sub> reductions from upwind, out-of-state sources for which no control measures have been adopted by the source state, nor has any petition for reductions has been received from the downwind State (Georgia). If implementation of NO<sub>x</sub> SIP Call measures occurs after a court decision, and if implementation follows a schedule similar to that anticipated by EPA (i.e., two years after adoption), reductions from the proposed NO<sub>x</sub> SIP Call will not likely be achieved until at least 2004. The Georgia MVEB is based upon NO<sub>x</sub> SIP Call measures being effective in 2003.

**Response:** Building upon the Ozone Transport Assessment Group (OTAG) recommendations and technical analyses, in November 1997, EPA proposed action to address the ozone transport problem. In its proposal, the EPA found that current SIPs in 22 states and the District of Columbia (23 jurisdictions) were insufficient to provide for attainment and maintenance of the 1-hour standard because they did not regulate NO<sub>x</sub> emissions that significantly contribute to ozone transport. 62 FR 60318 (November 7, 1997). The EPA finalized this rule in September 1998, calling on the 23 jurisdictions to revise their SIPs to require NO<sub>x</sub> emission reductions within the state to a level consistent with a NO<sub>x</sub> emissions budget identified in the final rule. 63 FR 57356 (October 27, 1998). This final rule is commonly referred to as the NO<sub>x</sub> SIP Call. Although the NO<sub>x</sub> SIP submittal date has been indefinitely stayed by a three-judge panel of the DC Circuit Court, the rule itself requiring emission reductions in 22 eastern states and the District of Columbia to be implemented by May 1, 2003, continues to be in effect. Therefore, EPA believes it is appropriate to allow states to continue to assume reductions from the NO<sub>x</sub> SIP Call

in areas outside the local 1-hour ozone modeling domain would be in place by that date.

#### IV. Weight of Evidence

**Comment:** EPA's final determination of adequacy may not rely on its weight of evidence policy. The State failed to demonstrate that adopted and additional emission reductions currently under consideration by the State will be adequate for attainment of the 1-hour ozone standard.

**Response:** Under section 182(c)(2) and (d) of the CAA, serious and severe ozone nonattainment areas were required to submit by November 15, 1994, demonstrations of how they would attain the 1-hour standard and how they would achieve reductions in VOC emissions of 9 percent for each three-year period until the attainment year (rate-of-progress or ROP plans). In meeting the ROP plan requirements, the Agency allowed states to substitute NO<sub>x</sub> for VOC emission reductions, provided a justification based on air quality improvement could be provided. The EPA allows states to rely on a modeled attainment demonstration supplemented with additional evidence to demonstrate attainment. Attainment is demonstrated when all predicted (i.e., modeled) 1-hour ozone concentrations inside the modeling domain are at or below the NAAQS or at an acceptable upper limit above the NAAQS permitted under certain conditions (depending on the severity of the episodes modeled) by EPA's guidance. The modeled attainment test compares model predicted 1-hour daily maximum ozone concentrations in all grid cells for the attainment year to the level of the NAAQS. A predicted concentration above 0.124 parts per million (ppm) ozone indicates that the area is expected to exceed the standard in the attainment year and a prediction at or below 0.124 ppm indicates that the area is expected to attain the standard. This type of test is often referred to as an exceedance test. The EPA's guidance recommends that states use either of two modeled attainment or exceedance tests for the 1-hour ozone NAAQS: a deterministic test or a statistical test. When the modeling does not conclusively demonstrate attainment, additional analyses may be presented to help determine whether the area will attain the standard. As with other predictive tools, there are inherent uncertainties associated with air quality modeling and its results. The EPA's guidance recognizes these limitations, and provides a means for considering other evidence to help assess whether attainment of the NAAQS is likely. The process by which this is done is called a weight of evidence (WOE) determination. Under a WOE determination, the state can rely on, and EPA will consider, factors such as other modeled attainment tests, e.g., a rollback analysis; other modeled output, e.g., changes in the predicted frequency and pervasiveness of 1-hour ozone NAAQS exceedances and predicted changes in the ozone design value; actual observed air quality trends (i.e. analyses of monitored air quality data); estimated emissions trends; the responsiveness of the model predictions to further controls; and whether there are additional control measures that are or will be approved into the SIP but that were not included in the modeling analysis. The identified emission reduction short falls needed to attain the 1-hour ozone standard and the state's commitment to achieve the additional emission reductions necessary for attainment is one of the factors the Agency can consider as weight of evidence. The State of Georgia has met the necessary requirements for the Agency to determine the SIP and the associated commitments

demonstrate attainment.

## **V. Continuing Sprawl Development**

**Comment:** Continuing sprawl development, vehicular mileage growth and similar matters are outlined in the attainment demonstration itself (pages 1-5 through 1-7). Indeed, the attainment demonstration document sets forth the very facts that undermine the Georgia EPD strategy which fails to address mobile source reduction. The plain message from the State's document is that the weight of the evidence leads them to believe that air quality is going to get worse because of sprawl-related factors. In addition to its implications for the weight of evidence analysis, the facts set forth in the attainment document regarding the sprawl and the stated need for mobile source control strategies positively demonstrates that the MVEB are not consistent with the emissions inventory and the control measures in the attainment demonstration, contrary to the requirements of 40 CFR 93.118(e)(4)(iv) and (v).

**Response:** The fact that the attainment demonstration identifies continuing sprawl and vehicular mileage growth as contributors to mobile source emissions does not affect the adequacy of the MVEB. The emissions reductions necessary to achieve attainment need not come from mobile sources as long as sufficient reductions are obtained from other sources. The MVEB, when considered together with all other emission sources, are consistent with the emissions inventory and the control measures in the attainment demonstration, and with the requirements of 40 CFR 93.118(e)(4)(iv) and (v).

## **VI. Voluntary Mobile Source Emissions Policy**

**Comment:** The use of the Partnership for a Smog Free Georgia (PSG) as a component of the weight of evidence determination is excessive and no substantial change has occurred to the voluntary program in three years that have included huge increases in the number and magnitude of ozone violations.

**Response:** EPA's Voluntary Mobile Source Emissions Policy (VMEP) allows states to take credit for up to three percent of the emissions reductions needed for attainment. In the case of the PSG, the State's documentation indicates that the PSG program has the potential to meet the three percent goal. As such, EPA has determined that the PSG credit in the attainment demonstration is sufficient for the Agency to find the attainment demonstration motor vehicle emissions budgets adequate. Georgia EPD has indicated that the PSG program achieves emission controls beyond the three percent reduction allowed by the Agency's policy for voluntary programs. Although these additional reductions are discussed in the weight of evidence section of the proposed approval, it is clearly stated that these additional reductions are not being used as credit toward demonstrating attainment.

## **VII. Vehicle Registration and Vehicle Use Rates**

**Comment:** The most recent update of the Region's emission inventory was due in November 1998, in accordance with CAA section 182(a)(1) and (3). The attainment SIP should use the most current vehicle registration and vehicle use rates established in the November 1998 emissions inventory update.

**Response:** The State of Georgia satisfied this requirement by submitting a periodic inventory on November 16, 1998, that used the most recent vehicle registration data available at that time. The State of Georgia used the same vehicle registration distributions in the attainment SIP as in the November 1998 emissions inventory update.

In the November 3, 1999, "*Guidance on Motor Vehicle Emissions Budgets in One-Hour Ozone Attainment Demonstrations*," EPA states that, when developing motor vehicle emissions budgets, "the MOBILE inputs (including vehicle fleet characteristics) must be appropriate and up-to-date as required by EPA's guidance on SIP inventories and the MOBILE user's guide." EPA is satisfied that the new attainment SIP is based on the latest available information from the November 1998 emissions inventory update, and therefore, meets the existing guidance.

## **VIII. Endorsement by the Governor**

**Comment:** There is no evidence in the attainment demonstration document that the Governor has endorsed the SIP as required by 40 CFR 93.118(e)(4)(i).

**Response:** The SIP must be submitted by the Governor (or a designee) and subject to public hearing. The Governor has delegated authority to endorse and officially submit SIPs to the Director of the Georgia Environmental Protection Division, Harold Reheis. Mr. Reheis endorsed the SIP in his cover letter dated October 28, 1999.